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SUB/O

the nanoparticulate drug particles comprise a poorly soluble drug, have an effective average particle size of less than about 1000 nm, and have a surface modifier adsorbed on the surface of the drug.

- V 52. The aerosol composition of claim 51, wherein the drug is selected from the group consisting of proteins, peptides, bronchodilators, corticosteroids, elastase inhibitors, analgesics, anti-fungals, cystic-fibrosis therapies, asthma therapies, emphysema therapies, respiratory distress syndrome therapies, chronic bronchitis therapies, chronic obstructive pulmonary disease therapies, organ-transplant rejection therapies, therapies for tuberculosis and other infections of the lung, fungal infection therapies, respiratory illness therapies associated with acquired immune deficiency syndrome, an oncology drug, an anti-emetic, an analgesic, and a cardiovascular agent.
- 53. The aerosol composition of claim 51, wherein the nanoparticulate drug particles have an effective average particle size of less than about 400 nm.
- 54. The aerosol composition of claim 51, wherein the nanoparticulate drug particles have an effective average particle size of less than about 300 nm.
- 55. The aerosol composition of claim 51, wherein the nanoparticulate drug particles have an effective average particle size of less than about 250 nm.
- 56. The aerosol composition of claim 51, wherein the nanoparticulate drug particles have an effective average particle size of less than about 100 nm.
- 57. The aerosol composition of claim 51, wherein the nanoparticulate drug particles have an effective average particle size of less than about 50 nm.
- 58. The aerosol composition of aim 51, wherein the aerosol comprises a concentration of a drug in an amount of from about 0.05 mg/mL up to about 600 mg/mL.

**PATENT** 

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59. The aerosol composition of claim 58, wherein the aerosol comprises a concentration of a drug selected from the group consisting of about 10 mg/mL or more, about 100 mg/mL or more, about 400 mg/mL or more, and about 600 mg/mL.

- 60. The aerosol composition of claim 51, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of about 2 to about 10 microns.
- 61. The aerosol composition of claim 60, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of from about 2 to about 6 microns.
- 62. The aerosol composition of claim 51, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of less than about 2 microns.
- 63. The aerosol composition of claim 51, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of about 5 to about 100 microns.
- 64. The aerosol composition of claim 63, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of about 30 to about 60 microns.
- 65. A method of making an aerosol of an aqueous dispersion of nanoparticulate drug particles, wherein said nanoparticulate drug particles comprise a poorly soluble drug, have an effective average particle size of less than about 1000 nm, and have a non-crosslinked surface modifier adsorbed on the surface thereof; wherein the method comprises:
  - (a) providing an aqueous dispersion of said nanoparticulate drug particles; and
  - (b) forming an aerosol comprising liquid droplets of said dispersion, wherein:
    - (i) essentially each droplet of the aerosol comprises at least one nanoparticulate poorly soluble drug particle and at least one surface modifier adsorbed to the surface of the drug particle, and

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(ii) the liquid droplets forming the aerosol have a mass mean aerodynamic diameter of less than about 100 microns.

- 66. The method of claim 65, wherein the drug is selected from the group consisting of proteins, peptides, bronchodilators, corticosteroids, elastase inhibitors, analgesics, anti-fungals, cystic-fibrosis therapies, asthma therapies, emphysema therapies, respiratory distress syndrome therapies, chronic bronchitis therapies, chronic obstructive pulmonary disease therapies, organ-transplant rejection therapies, therapies for tuberculosis and other infections of the lung, fungal infection therapies, respiratory illness therapies associated with acquired immune deficiency syndrome, an oncology drug, an anti-emetic, an analgesic, and a cardiovascular agent.
- 67. The method of claim 65, wherein the nanoparticulate drug particles have an effective average particle size of less than about 400 nm.
- 68. The method of claim 67, wherein the nanoparticulate drug particles have an effective average particle size of less than about 300 nm.
- 69. The method of claim 68, wherein the nanoparticulate drug particles have an effective average particle size of less than about 250 nm.
- 70. The method of claim 69, wherein the nanoparticulate drug particles have an effective average particle size of less than about 100 nm.
- 71. The method of claim 70, wherein the nanoparticulate drug particles have an effective average particle size of less than about 50 nm.
- 72. The method of claim 65, wherein the aerosol comprises a concentration of a drug in an amount of from about 0.05 mg/mL up to about 600 mg/mL.

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- 73. The method of claim 72, wherein the aerosol comprises a concentration of a drug selected from the group consisting of about 10 mg/mL or more, about 100 mg/mL or more, about 200 mg/mL or more, about 400 mg/mL or more, and about 600 mg/mL.
- 74. The method of claim 65, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of about 2 to about 10 microns.
- 75. The method of claim 74, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of from about 2 to about 6 microns.
- 76. The method of claim 65, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of less than about 2 microns.
- 77. The method of claim 65, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of about 5 to about 100 microns.
- 78. The method of claim 77, wherein the droplets of the aerosol have a mass median aerodynamic diameter (MMAD) of about 30 to about 60 microns.
- 79. A method of administering the aerosol of claim 51 to a patient, wherein the aerosol comprises drug at a concentration of 10 mg/mL or greater, and wherein the patient delivery time for the aerosol administration is about 15 seconds or less.--

## **REMARKS**

Applicants respectfully request formal examination of this application.

## I. STATUS OF THE CLAIMS

Claims 1-50 have been cancelled, without prejudice or disclaimer thereof, and claims 51-79 have been added to the application. Applicants reserve the right to prosecute the subject matter of the cancelled claims in this or another application.